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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/345,270	06/30/1999	IN CHEOL PARK	CU-1962-RJS	1023

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EXAMINER

NGUYEN, DUNG T

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 03/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/345,270

Applicant(s)

PARK ET AL.

Examiner

Dung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 02 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 21-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/02/2002 has been entered.
2. Applicant's amendment filed on 12/02/2002 has been received and entered.
3. Applicant's arguments with respect to claims 1, 9 and 11 have been considered but are moot in view of the new ground(s) of rejection as follow:.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the quarter wave plate sandwiched between the polarizing plate and the upper substrate (claims 9 and 11) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 9 is objected to because of the following informalities: "a thing film" (line 17) should be changed to --a thin film--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 1 recites the limitation "the selected distance" in line 20. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

8. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

9. Claim 9 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 11.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al., US Patent No. US 6,233,034, in view of Kashnow, US Patent No. 3,912,369.

Regarding claims 1-2, Lee et al. disclose a liquid crystal display (LCD) device (figures 5A-5B and 6) comprising:

a lower substrate (40);

a upper substrate (52) being separated to the lower substrate by a first distance (d11);

a liquid crystal layer (57);

a gate bus line (41), a data bus line (47) and a thin film transistor (TFT) (45);

a transparent counter electrode (43) and a transparent pixel electrode (46) being separated by a distance (111) as claimed, wherein the first distance is greater than distance between the counter and pixel electrodes;

a polarizing plate (59).

Regarding claims 3-6, Lee et al. also disclose a pair of alignment layers (55 and 56) as claimed (see col. 12, lines 9-14 and paragraph bridging col. 12-13).

Regarding claims 7-8 and 20, Lee et al. further disclose the liquid crystal layer can be positive or negative dielectric anisotropy (see col. 13, lines 3-11) and a retardation value being 0.2 to 0.6 μ m (col. 12, ln. 28).

Lee et al. do not disclose a reflecting plate as well as a quarter wave plate sandwiched between the reflecting plate and the lower substrate. However, Kashnow does disclose a reflecting plate (reflector 25) and a quarter wave plate (22) being disposed between the reflector (25) and a lower substrate of an LCD cell (14) (see figure 5). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to modify the Lee et al. device having a reflecting plate and a quarter wave plate as shown by Kashnow in order to obtain a reflective LCD device as well as to improve a display characteristics (col. 1, ln. 34).

12. Claims 9-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al., US Patent No. US 6,233,034, in view of Applicants' admitted prior art (APA), figure 1A-1B.

Regarding claims 9-19, Lee et al. disclose the claimed invention as described above except for a reflecting plate as well as a quarter wave plate sandwiched between the polarizing plate and the upper substrate. However, APA does disclose a reflecting plate (reflecting plate 16) and a quarter wave plate (17) being disposed between a polarizing plate (18) and an upper substrata (18). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to modify the Lee et al. device having a reflecting plate and a quarter wave plate as shown by APA in order to obtain a reflective LCD device as well as to improve a contrast ratio in an LCD device (see application, page 1, line 22-31).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 703-305-0423. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 703-305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7726 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

DN
03/10/2003



Dung Nguyen
Patent Examiner
GAU 2871